

From: David Ralston [REDACTED]
To: Eric Gray [REDACTED]
CC: Matt Railo [REDACTED]
BCC:
Subject: Re: Latest - Commerce and Payments Deck - DRAFT
Attachments: Railo_s deck for 2018 Eddy offsite_v5DR.key;
Sent: 03/10/2018 07:49:18 PM 0000 (GMT)

Here is the updated deck in black corporate template. I did not touch the hidden slides. The Apple Pay wallet is gray and I could not find one in white.

Cheers - David

PLAINTIFF
U.S. District Court - NDCAL
4:20-cv-05640-YGR-TSH
Epic Games, Inc. v. Apple Inc.
Ex. No. PX-0523
Date Entered _____
By _____

Exhibit
PX 523



Payments & Commerce

One Apple

March 2018

App & Content-Internal Use Only

Today - Fragmentation

Customer Experience

Sign up, payment method, buy, checkout, invoice are unique per channel: Retail, Apple Online Store, App Store, Apple Music, iCloud

Commerce & Payments Infrastructure

Bespoke commerce engines: Retail Stores, AOS, AMP

Despite collaboration, Apple Pay, iTunes Payment Services (iPS) and Apple Payment Gateway (APG) are separate systems and are managed separately

Developer Experience

In app purchase using Apple's commerce and payments infrastructure is required for digital goods and services

For physical goods and services developers are required to build/integrate with others, even when Apple Pay is a supported payment method

Apple Confidential-Internal Use Only

Today - Fragmentation

Customer Experience

Unique sign up, payment method, buy, checkout, invoice per channel

Commerce & Payments Infrastructure

3 commerce engines

Systems are managed separately (despite collaboration)

Developer Experience

Use Apple's commerce engine for digital goods

Build/integrate with others for physical goods (even with Apple Pay support)

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Customers

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One Customer Experience



Wallet

All payment
methods in one location

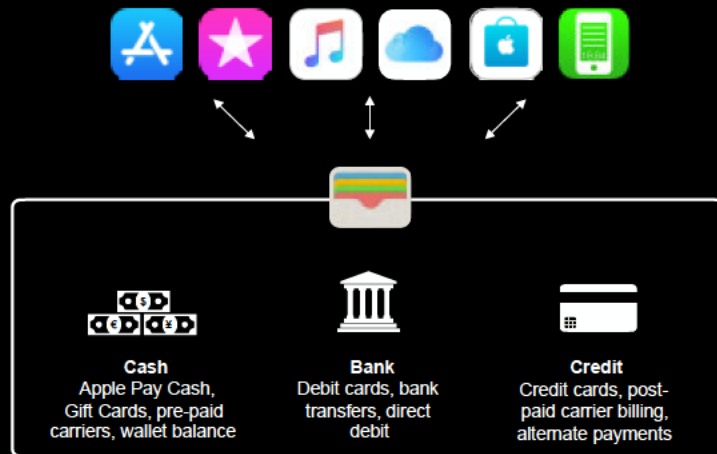


Billing Management

Unified experience for purchases,
invoices and subscription management

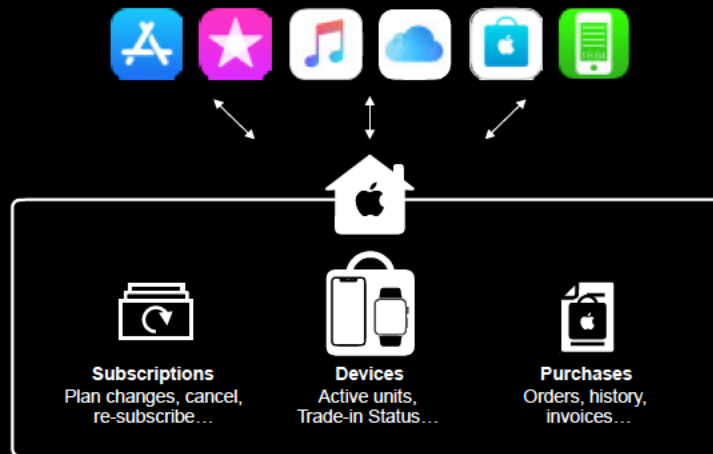
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One Wallet



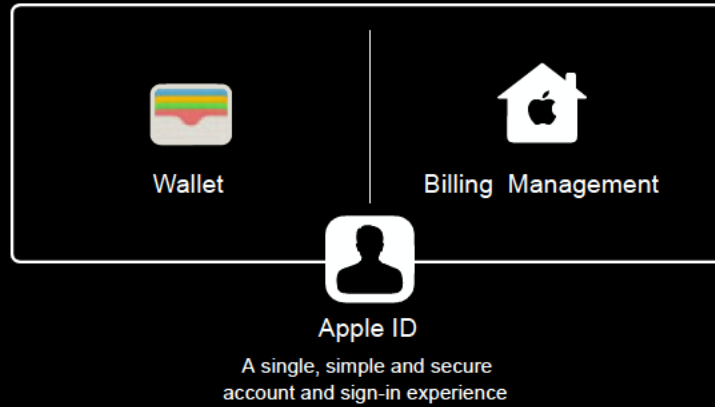
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One Place to Manage Billing



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One Account



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Commerce & Payments Infrastructure

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One Infrastructure



Apple Pay

Single Platform

Commerce Engine
(Digital & Physical)

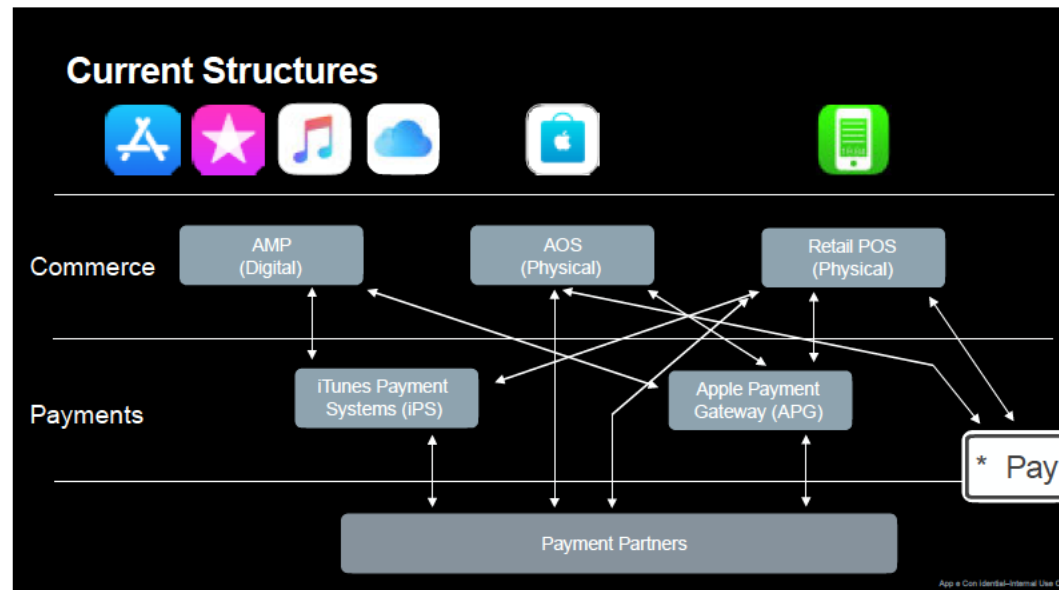
Payment Services



Billing
Management

Payment Partners

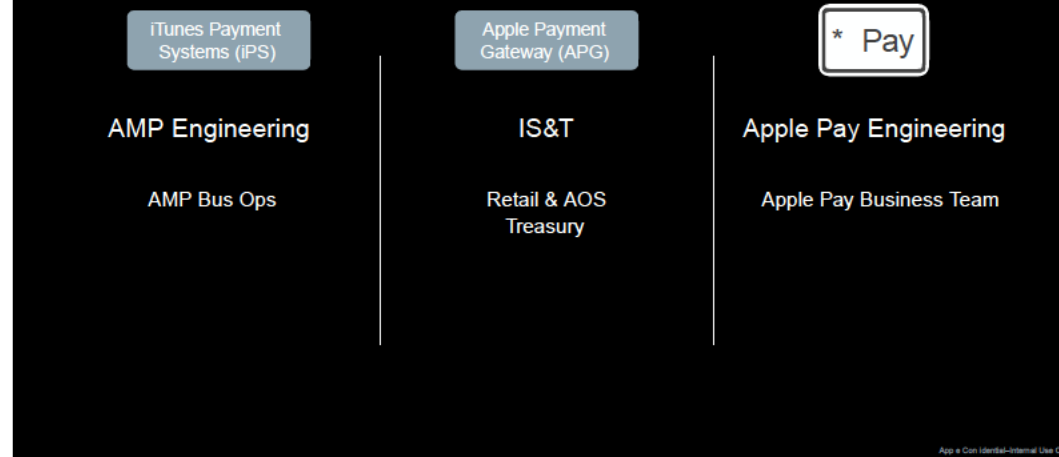
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Impact of Payment Systems Duplication:

- High development cost
- High operational/processing costs
- Slow time-to-market
- High operational risk

Payment Organization



- Collaborative and removed some layers of redundancy
- Still separate platforms, separate teams, etc.
- Some synergies (credit cards for all Apple); Alipay for Retail and AMP

Rationalization By Method

iTunes Payment
Systems (IPS)

Alternates

Alipay for China Retail
Brazil (Cielo for Cards)

AMP Bus Ops
Retail & AOS
Treasury

Apple Payment
Gateway (APG)

Cards

Chase Paymentech
Korea (Inicis)

Retail & AOS
Treasury
AMP Bus Ops



Future

AMP Acceptance

Apple Pay Business Team
AMP Bus Ops

App & Con Identical-Internal Use Only

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Retail & AOS
Treasury
AMP Bus Ops



Future

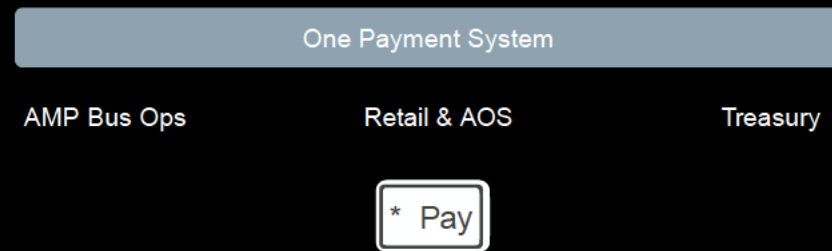
AMP Acceptance

Apple Pay Business Team
AMP Bus Ops

App & Con Identical-Internal Use Only

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Future is Now



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Commerce Organization



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Current Apple-wide Initiatives

Apple

AMP Engineering

IS&T

Subscriptions (Morocco)

Fraud Engine (Athena)

Modularization

Tax (Honeycomb)

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Future

Apple

Past

Fraud Engine (Athena)

Present

Tax (Honeycomb)
Subscriptions (Morocco)
Modularization

Future

Credit
Foreign Currency
Identity Verification

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Developers

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Goods & Services



Digital

Apps, Games,
Music, Video, News...



Physical

Apparel, Ride hailing,
Food Delivery, Travel, Appliances...



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Industry



App and IAP



Mobile Commerce

Total Spend

\$62B

\$1.18T

Est. Spend on iOS

\$38B

\$650B

Share of iOS Spend
Captured by Apple

~30%

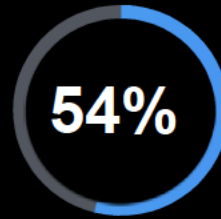
~0.008%

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Industry



Mobile Web



App

App Share of
mCommerce Transactions
in Retail Sector

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An Example



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Other Early Opportunities



Travel



Ticketing



IOT

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Discussion

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Ownership



Apple Pay

Single Platform

Commerce Engine
(Digital & Physical)

Payment Services



Billing
Management

Payment Partners

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Discussion

Is this a Product?

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500M

Customers Touching Commerce

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Per quarter

200M

Paying Customers

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Per quarter

100K

Legitimate Customers Blocked

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Per quarter

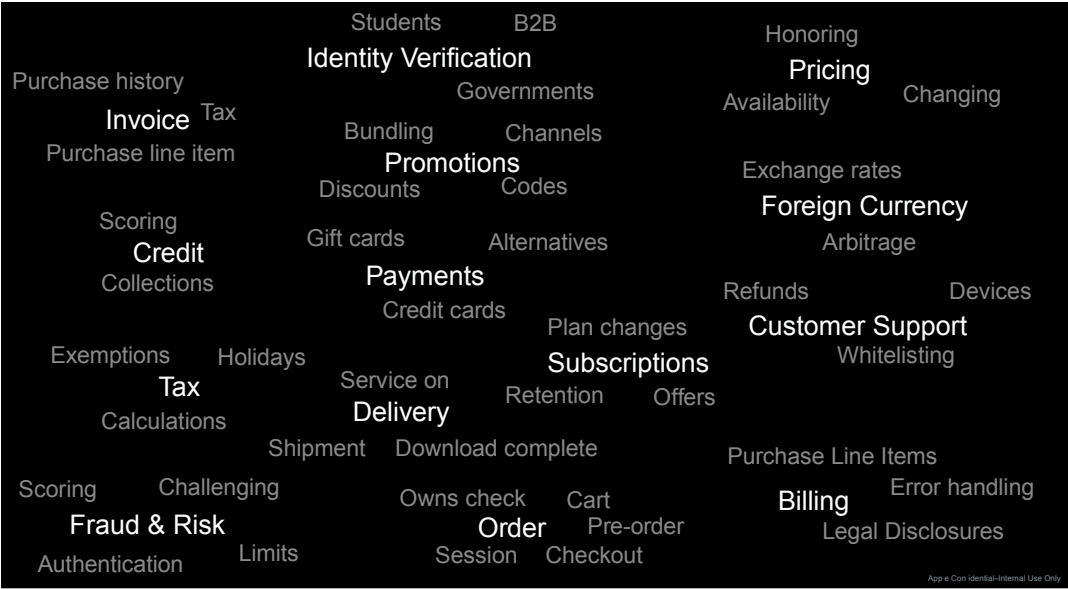
10K

Tax Charges Manually Removed

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Per quarter





edits:
(1) Credit
(2) tightened up some of the spacing

What is Commerce?
+Physical
Tax - calculations, holidays, exemptions
Order - owns check, session model
Invoice - purchase history, purchase line items [**tax?**]
Payments - store credit, credit cards, alternates
Pricing - honoring, changing, availability
Subscriptions - upgrades, retention,
Fraud & Risk - scoring, challenging, authentication, limits
Billing - purchase line items, legal disclosures
Delivery - download complete [**service on?**]
Customer support - refunds, whitelisting, devices
Credit - scoring, collections
Identity verification - students, governments, B2B
Foreign currency - exchange rates, arbitrage
Promotions - ad-hoc, discounts, messaging

Today - Fragmentation

Customer Experience

Sign up, payment method, buy, checkout, invoice

Unique experiences: Retail, Apple Online Store, App Store, Apple Music, iCloud

Commerce & Payments Infrastructure

Each store has its own commerce engine (Retail Stores, AOS, AMP)

Despite collaboration, Apple Pay, iTunes Payment Services (IPS) and Apple Payment Gateway (APG) are separate systems and are separately managed

Developer Experience

In app purchase using Apple's commerce and payments infrastructure is required for digital goods and services

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Looking Forward

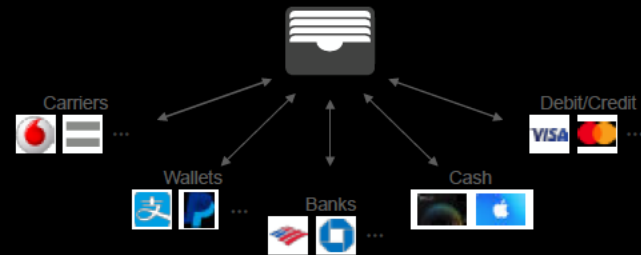


on iDevice-Internal Use Only

One Apple Experience, Many Merchant Opportunities

Apple Confidential—Internal Use Only

One Wallet



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One Place to Manage



Purchases

Pending orders, invoices,
purchase history, active devices



Communications

Emails, notifications,
preferences



Subscriptions

Manage plan changes,
cancel, re-subscribe

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edits:

1. removed and between cancel, re-subscribe

Modularization

Account

Buy

Deliver

Bill

Collect

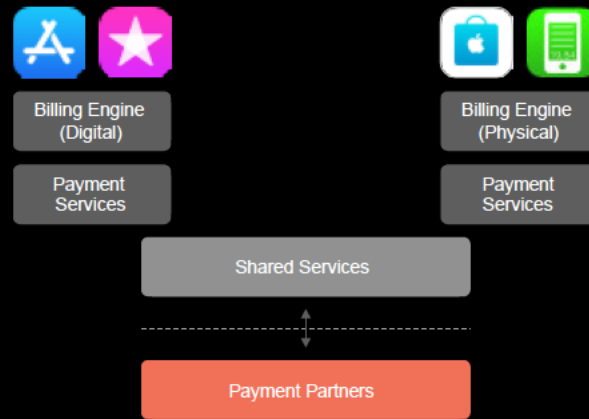
Invoice

Shared Services

Payment Partners

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Current Payments Processing



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Impact of Payment Systems Duplication:

- High development cost
- High operational/processing costs
- Slow time-to-market
- High operational risk

One Apple Experience

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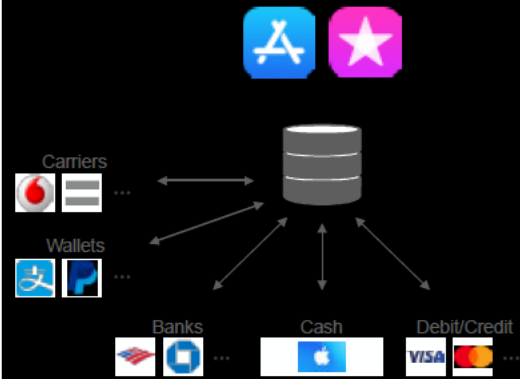
One Payment Platform, One Experience

App e Confidential-Internal Use Only

One Wallet, Multiple Payment Methods

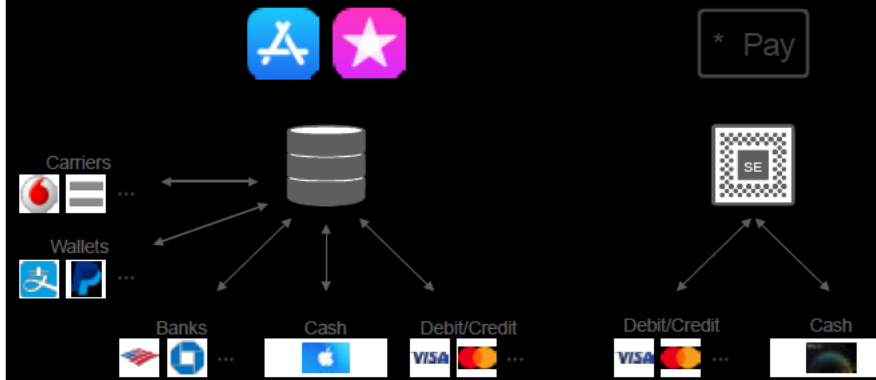
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Payment Instruments



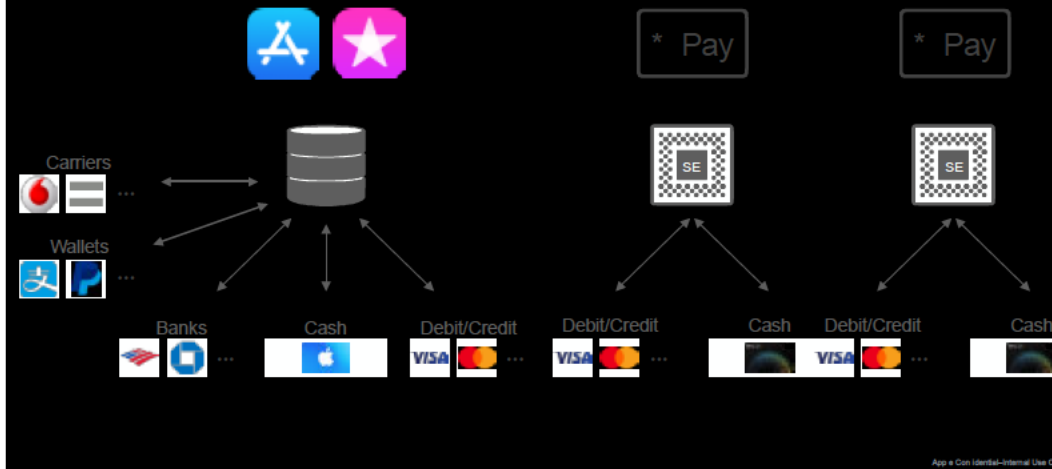
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Payment Instruments - Different Instances

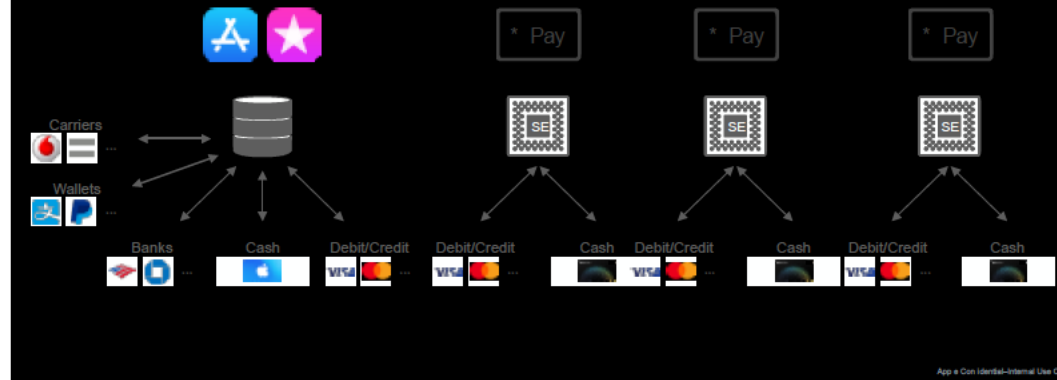


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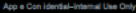
Payment Instruments - Different Instances



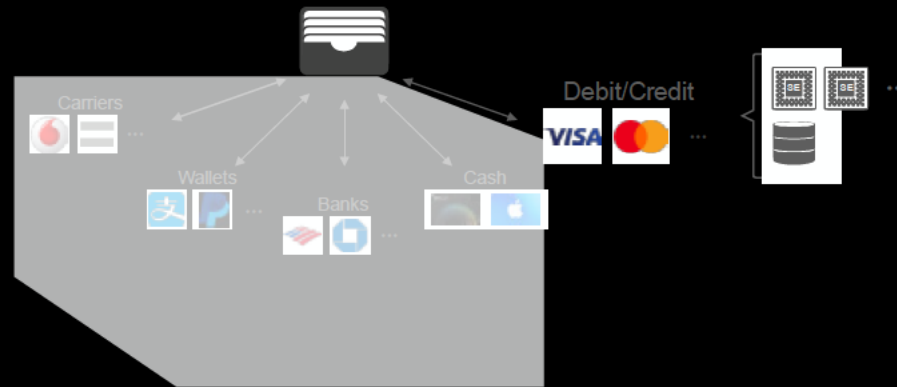
Payment Instruments - Different Instances



states

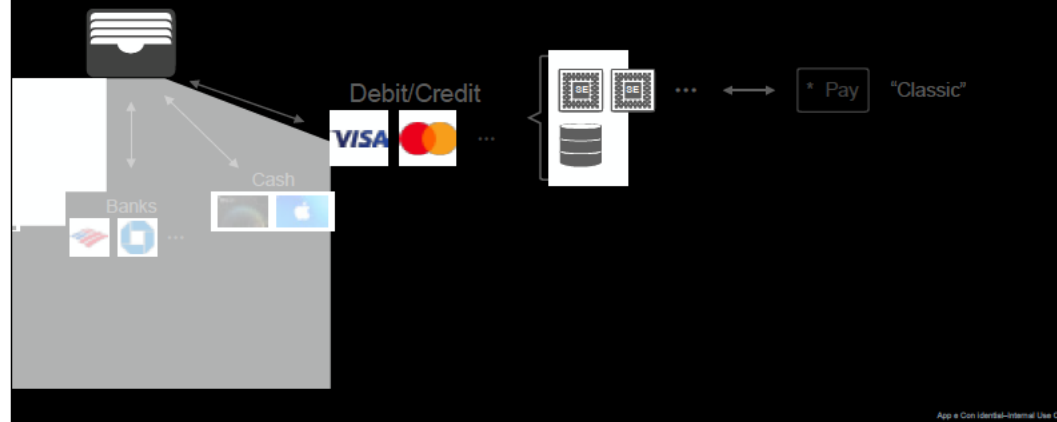


One Wallet - A Single Instance of Each Card

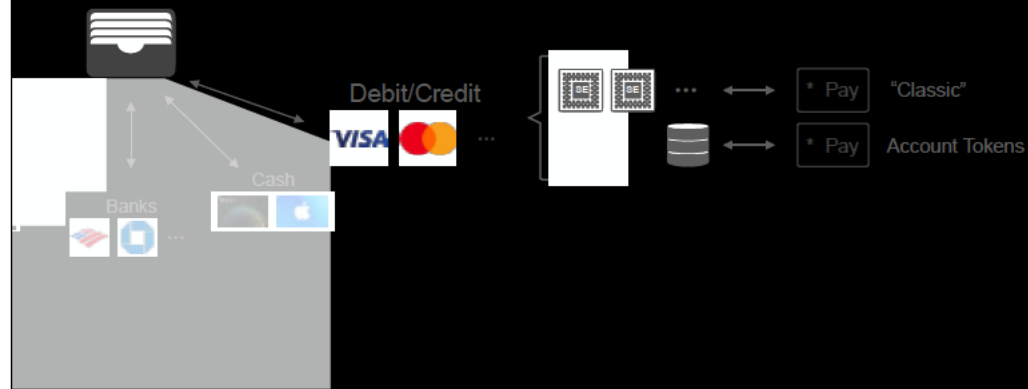


App e Con Identità-Internal Use Only

One Wallet - A Single Instance of Each Card



One Wallet - A Single Instance of Each Card



App e Con Identità-Internal Use Only

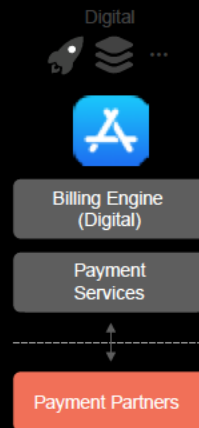
One Account

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Native Apps

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Native Apps - Opportunities

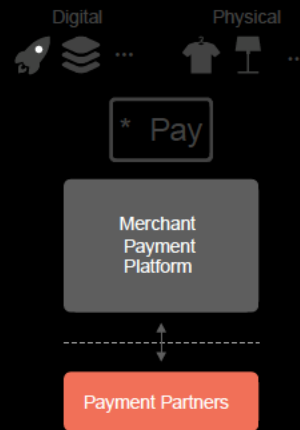


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Web & Mobile Web

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Web - Opportunities



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Different Merchants, Different Needs



e-Commerce

Apple Pay Cash, Credit/Debit Cards,
ACH, Carrier Billing, PayPal...



In-Store

Apple Pay Cash, Credit/Debit Cards

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Billing Engine



Aggregation

Session management engine



Billing

Recurring Billing & Line of Credit



Cross-Channel

Cross Apple merchants
use cases (Morocco)

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Different Platforms



Native Apps

iOS, macOS, tvOS



Web

Mobile & Desktop Web

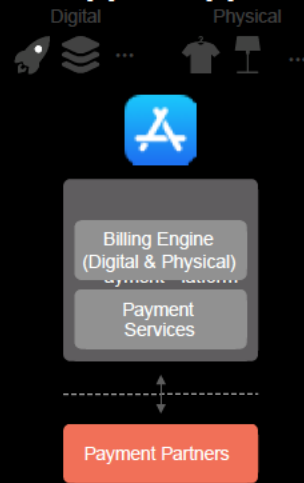


In-Store

Brick-and-Mortar

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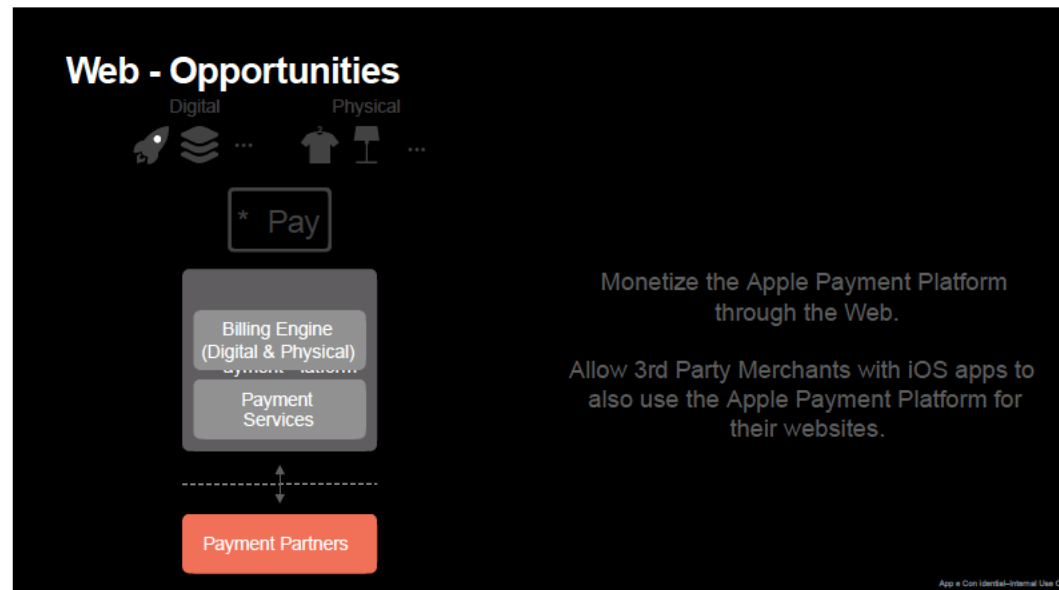
Native Apps - Opportunities



Monetize the Apple Payment Platform through the App Store.

Allow 3rd Party Merchants to sell Physical goods through Apple Payment Platform.

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add Carson's pitch highlights, \$
check w/ Fischer on duplication, retail as a talking point

Modularization

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Tax

Support accurate tax calculations
(e.g. VAT, sales, telecom, amusement and more)
for all products (physical and digital; goods and services)
world-wide



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Subscriptions



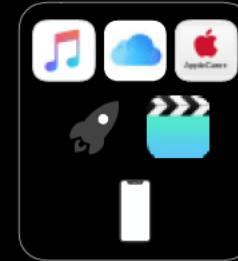
Services at Retail

Retail and AOS to sell
1st party subscriptions



Services Bundled

1st party
subscriptions



Hardware & Services

Bundling Apple hardware
with services

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Notes

Commerce moving in AMP because of subscriptions, but rest of Apple not
Initial call was to not build a second subscription engine
Subs is min 3 layers down from Jeff and Mary, therefore too deep to get support
Morocco as the start (Aristotle on the back of that), only place where we have a common platform
Bundling with hardware alongside (or after) Aristotle, Ocelot